In the Claims

Applicant submits a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts.

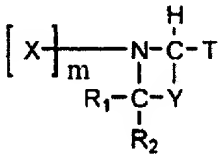
Please cancel claim 7.

Please amend claims 1, 8, 9 and 22 as noted below.

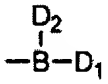
Please add new claim 24 as noted below.

Please re-write the claims as follows:

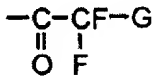
1. (Currently Amended) A method for treating a medical disorder in a subject mediated by the alteration of substrate activity comprising administering to the subject an effective amount of a compound having the formula ~~PR, wherein P represents a targeting moiety that binds to DPP-IV, and R represents a reactive group that reacts a reactive center of DPP-IV,~~



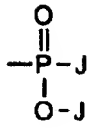
where T is selected from a group of the formula:



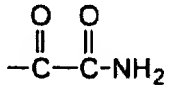
where each D_1 and D_2 independently, is a hydroxyl group or a group which is capable of being hydrolyzed to a hydroxyl group in aqueous solution at physiological pH;
a group of the formula:



where G is either H, F, or an alkyl group containing 1 to 20 carbon atoms and, optionally, heteroatoms selected from the group consisting of N, S and O;
a group of the formula:

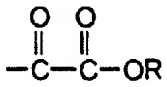


where each J, independently, is any number of C, H, O, S or N atoms in any combination;
a group of formula

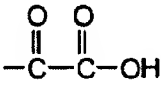


;

a group of formula

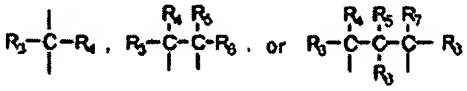


where R is a substituted or unsubstituted alkyl or aryl group, or an alphaketo ester;
or a group of formula



;

wherein Y is group of formula:



each R_1, R_2, R_3, R_4, R_5, R_6, R_7, and R_8 is H; X is any number of C, H, O, S, or N atoms; and m can vary from 0 to 20,

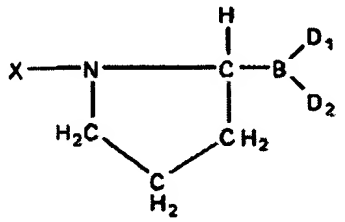
said amount being sufficient to prevent chemokine alteration by inhibiting DPP-IV activity,

wherein the medical disorder is selected from the group consisting of ~~an intestinal disease,~~ arteriolosclerosis~~,~~ and insufficient blood clotting.

2.-7. (Cancelled)

8. (Currently Amended) The method of claim ~~7~~ 1 wherein T is a boronate group, a phosphonate group, or a trifluoroalkyl ketone group; each Y is CH_2-CH_2; ~~each R is independently chosen from the group consisting of the R group of proline and the R group of alanine;~~ and the compound has a binding or dissociation constant to DPP-IV of at least 10^{-9}M.

9. (Currently Amended) The method of claim ~~7~~ 1 wherein the compound has the formula



wherein each D_1 and D_2 is a hydroxyl group; wherein X is an amino acid; and wherein C is bonded to B in the L-configuration.

10. (Original) The method of claim 9 wherein the compound is Val-boroPro.

11. (Previously Presented) The method of claim 9 wherein the compound is cyclic X-boroPro.

12. (Original) The method of claim 1 wherein the substrate is selected from the group consisting of SDF-1, RANTES, MIP-1, MIP-3, GLP-2, G-CSF, EPO, IL-6, IL-11, IL-8, Substance P, fibronectin, and monomeric fibrin.

13. (Cancelled)

14. (Original) The method of claim 1 wherein the compound is given to the subject by oral administration.

15. (Original) The method of claim 1 wherein the compound is given to the subject by parenteral administration.

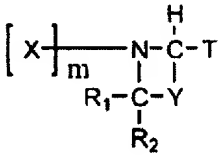
16. (Original) The method of claim 1 wherein the effective amount is in the range of 0.01 mg/kg per day to 100 mg/kg per day.

17.-21. (Cancelled)

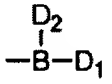
22. (Currently Amended) The method of claim 7, wherein ~~where~~ each J, independently, is O-alkyl, N-alkyl, or alkyl.

23. (Previously Presented) The method of claim 22, wherein each O-alkyl, N-alkyl or alkyl contains 1-20 carbon atoms and, optionally, heteroatoms selected from the group consisting of N, S and O.

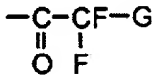
24. (New) A method for treating an intestinal disease consisting essentially of administering to a subject in need thereof an effective amount of a compound having the formula



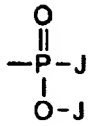
where T is selected from a group of the formula:



where each D_1 and D_2, independently, is a hydroxyl group or a group which is capable of being hydrolyzed to a hydroxyl group in aqueous solution at physiological pH;
a group of the formula:

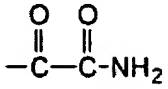


where G is either H, F, or an alkyl group containing 1 to 20 carbon atoms and, optionally, heteroatoms selected from the group consisting of N, S and O;
a phosphonate group of the formula:



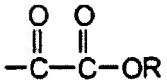
where each J, independently, is any number of C, H, O, S or N atoms in any combination;

a group of formula



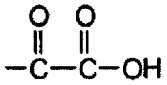
;

a group of formula



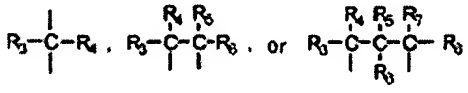
where R is a substituted or unsubstituted alkyl or aryl group, or an alphaketo ester;

or a group of formula



;

Y is group of formula:



and each R_1, R_2, R_3, R_4, R_5, R_6, R_7, and R_8 is H;

X is any number of C, H, O, S, or N atoms; and

m can vary from 0 to 20,

said amount being sufficient to prevent chemokine alteration by inhibiting DPP-IV activity,

wherein the intestinal disease is not a cancer, tumor or neoplasm.